

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/540,786  
Confirmation No.: 2087  
First-Named Inventor: Andreas Melzer  
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Group Art Unit: 3734  
Examiner: Lindsay Bachman  
Attorney Docket No.: 008324-000002  
Title: VESSEL FILTER

**DECLARATION UNDER 37 C.F.R. 1.132**

I, Dr. Andreas Melzer of the city of Niedernhausen an der Ruhr, Germany, swear as follows:

1. I received my Doctor of Medicine (M.D.) degree from University Mainz, Germany in 1993 and PhD from University Witten Herdecke, Germany in 1998.
2. I have been working in the field of magnetic resonance imaging for fourteen years.
3. I am currently employed by Biophan Europe as a Chief Executive Officer (CEO) and I am holding position of full Professor of Medical Technology at University Dundee, UK.
4. Because of my educational background and work experience, I am familiar with the design of vessel stents and Vena Cava Filters (VCFs) for use in MRI imaging applications.
5. Along with Busch et al., I am a co-author of the article entitled "A Physical Explanation of Active MRI Stents (aMRIs) and first 'in vitro' and 'in vivo' Results," ISMRM 10<sup>th</sup> Meeting Proceedings, 5/18/2002, XP-002277512, Honolulu, HI, USA (hereinafter "Busch").
6. I have specific knowledge of the design of the "Meander Stent" discussed by Busch.

7. The Busch Meander Stent comprises a single conductor. Starting with a first end of the conductor, a first portion of the conductor is bent into a meander shape that provides the mechanical function or "scaffolding" of the stent. The shape of the first portion also creates the inducting function of the stent. However, a second portion of the conductor is left straight, except for a single bend, and used as a "return pass cable" to enable the second end of the conductor to be brought in close proximity to the first end.
8. This second portion of the Busch Meander Stent does not contribute to the mechanical function of the device. In fact, the return pass cable must be a thin wire to ensure that the stent implantation is minimally affected by the presence of the return pass cable. Both the supporting and inducting functions of the Busch stent are therefore performed by only a portion of the conductor.
9. The Bush reference teaches that an external capacitor (already comprising a dielectric core and charging conductors) may be attached between the two ends of the "meandering" conductor to create the capacitance component of the inductance/capacitance (LC) circuit. The capacitor does not contribute to the supporting function of the stent.
10. The Bush Meander Stent can not be used as a stent for human applicable products. It has been a demonstrator model to prove the concept of resonant stents.
11. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on that information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by a fine or imprisonment, or both under §1001 of Title XIX of the United States Code and that such willful false statements may jeopardize the validity of the application and/or patent issued therefrom.



Dr. Andreas Melzer

30. Dec. 2008

Date